

FIG. 1

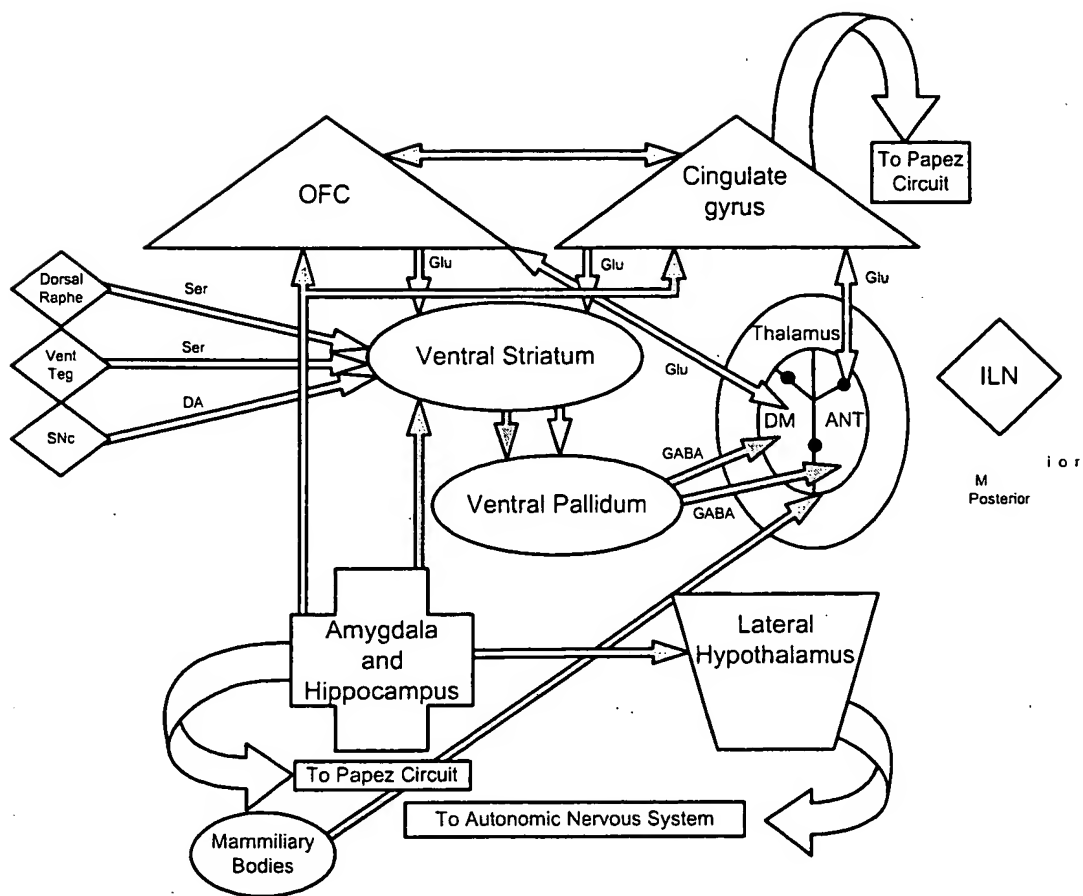


FIG. 2

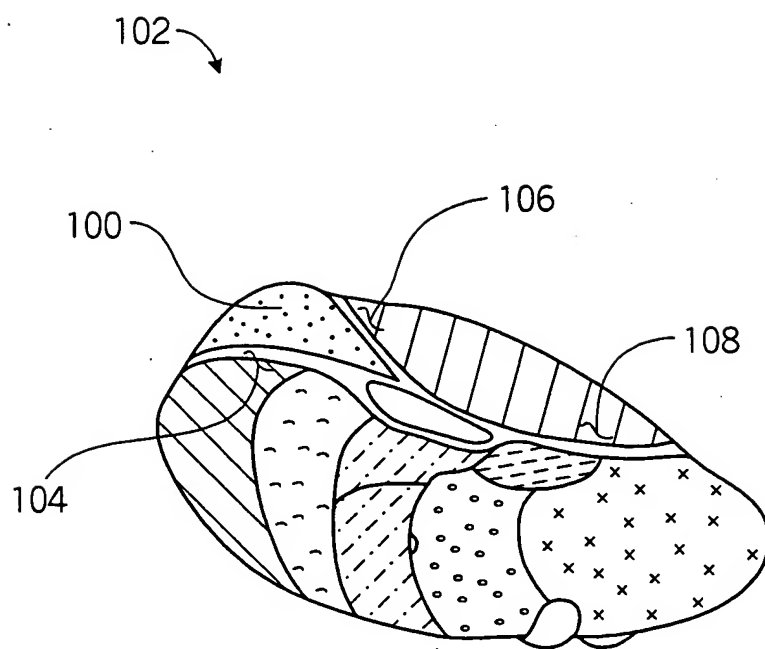


FIG. 3

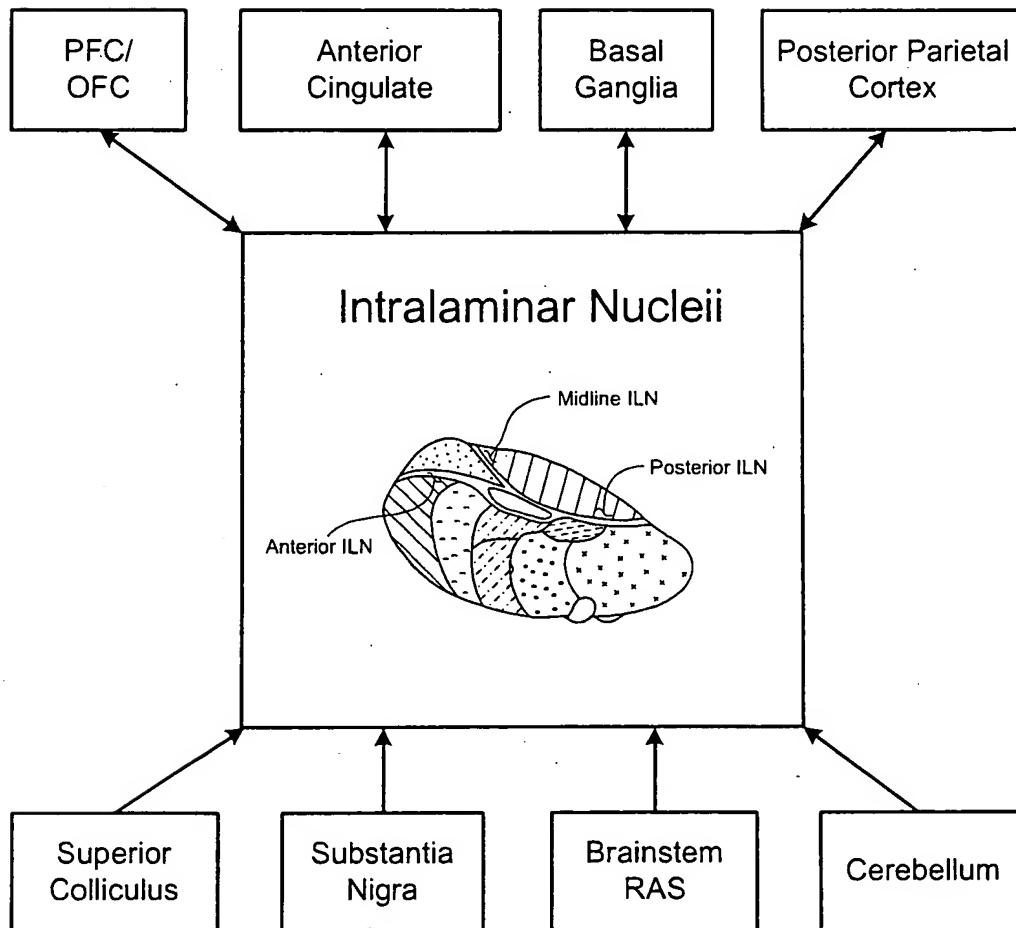


FIG. 4

Figure 5

Location		Lateral X	AP Y	Sagittal Z
		(all measurements are in mm and relative to AC-PC line)		
Cortical and Limbic				
Pre-frontal cortex	PFC	Falx to Sphenoid ridge	20 mm ant. to coronal suture and anteriorly	Superior, middle and inferior frontal gyrus
Orbitofrontal cortex	OFC	Medial to inferior frontal gyrus and lateral to gyrus rectus	Anterior commissure and anteriorly	Frontal fossa base to cingulate sulcus
Anterior limb of the internal capsule	IC-ant	10 to 20	AC: 3 to 10	10 to 0
Cingulate cortex	Cing	5 to 9	15 to 25 posterior to frontal horn tip	1 to 5 above ventricular roof
Amygdala	Amy	12 to 22	MCP: 3 to 15	-15 to -25
Hippocampus	Hipp	medial to temporal horn	amygdala to 30 posterior	-10 to -25
Mamillary Bodies	MB	0 to 5	MCP: 2 to 12	-5 to -15
Lateral Hypothalamus	LH	5 to 15	AC: 5 to -5	0 to -10
Basal Ganglia				
Nucleus Accumbens	nAcc	5 to 13	AC: 0 to 5	3 to -5
Caudate nucleus	Caud	12 to 25	AC: 0 to 10	0 to 15
Ventral Striatum	VS	15 to 30	MCP: 0 to 10	3 to 10
Ventral Pallidum	VP	15 to 30	MCP: 0 to 6	3 to 10
Thalamus				
Anterior nucleus of the thalamus	Ant	2 to 12	AC: 7 to -5	0 to 13
Dorsomedial nucleus of the thalamus	DM	0 to 10	AC: 0 to -5	0 to 13
Brainstem				
Locus Ceruleus	LC	0 to 7	MCP: -10 to -20	-5 to -20
Dorsal Raphe Nucleus	DR	0 to 7	MCP: -10 to -20	-3 to -15
Ventral Tegmentum	VT	0 to 15	MCP: 3 to -10	-5 to -15
Substantia Nigra Pars Compacta	SNc	5 to 12	MCP: 5 to -12	-5 to -20
Substantia Nigra Pars Reticulata	SNr	6 to 15	MCP: 5 to -12	-5 to -20
Superior Colliculus	SC	0 to 12	PC: -5 to -15	0 to -7

Additional details of the correlation of areas of the brain to the intralaminar nuclei subdivisions and their projections can be found in Jones, et al. Eds., The Thalamus Amsterdam: Elsevier (1995), which is hereby incorporated by reference in its entirety.

MCP: Relative to Midcommisural point (anterior is positive)
 AC: Relative to the anterior commissure (anterior is positive)
 PC: Relative to the posterior commissure (anterior is positive)
 Sagittal: Superior is positive, Inferior is negative

Figure 6

Location	Abbrev	Lateral X	AP Y	Sagittal Z	Interconnections
		(all measurements are in mm relative to AC-PC Line)			
Intralaminar thalamic nuclei	ILN				
Anterior ILN		7 to 13	MCP to 10 anterior	0 to 13	Prefrontal cortex, parietal cortex, visual association cortex, motor cortex
Central Lateral (CL)	ILN-CL				Prefrontal cortex, orbitofrontal cortex, anterior cingulate
Paracentralis (Pc)	ILC-Pc				Prefrontal Cortex, temporal association cortex, anterior parietal
Paralamellar MD	ILC-PI				
Posterior ILN		5 to 10	MCP: -5 to PC: -7	0 to 13	Prefrontal cortex, premotor cortex, parietal association cortex
Centromedian(Cm)	ILN-CM				Prefrontal cortex, premotor cortex, parietal association cortex
Parafascicularis(Pf)	ILN-Pf				
Midline ILN		2 to 8	MCP to 10 anterior	0 to 13	Amygdala, Limbic System, hippocampus
Paraventricularis (Pv)	ILN-Pv				Orbitofrontal, limbic System, Hippocampus, Amygdala
Central Medial (CM)					
Midline Nuclei	ILN-mld				

MCP	Mid commissural point (anterior is positive)
AC	Anterior commissure
PC	Posterior commissure
Sagittal	Superior is positive, Inferior is negative